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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/025,120

12/18/2001

William Von Novak

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02/19/2004

Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER

LEA EDMONDS, LISA S

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 02/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/025,120	VON NOVAK, WILLIAM	
	Examiner	Art Unit	
	Lisa Lea-Edmonds	2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-26 is/are rejected.
- 7) ☒ Claim(s) 5-7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 8-13, 17-20, and 22-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Matthews (5432510). With respect to claims 1-4, 8-13, 17-20, and 22-26, Matthews teaches a handheld electronic device comprising a housing; a plurality of input keys disposed around the housing locations where fingers will naturally land when the handheld device is being held in an average-sized hand; and a processing circuit within the housing and coupled to the plurality of keys, the processing circuit being responsive to actuation of a selected combination of at least one key by generating data representing a character, wherein the processing circuit comprises an interface coupled to the plurality of keys for generating said data representing a character; and a processor for processing said data representing a character, wherein the processing circuit further comprises a store coupled to the processor for storing data for use by the processor, further comprising a display for displaying a representation of said character represented by the data generated by the processing circuit, wherein the plurality of key comprises four keys positioned for actuation by a respective finger of a said average-sized hand, and a fifth key positioned for actuation by the thumb of a said average-sized hand, wherein the interface comprises a lookup table defining a relationship between the generated data and the combinations of at least one key, wherein the relationship is defined for characters in an alphabetical order, wherein the relationship is defined for characters in a most frequently used letter order, wherein the plurality of key comprises four keys positioned for actuation by a respective finger of a said average-sized hand, and a fifth key positioned for actuation by the thumb of a said average-sized hand, wherein the interface

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comprises a lookup table defining a relationship between the generated data and the combinations of at least one key, wherein the relationship is defined for characters in an alphabetical order, wherein the relationship is defined for characters in a most frequently used letter order. Matthews also teaches a handheld electronic device comprising a housing; a plurality of input keys disposed around the housing at locations where fingers will naturally land when the handheld device is being held in an average-sized hand; an interfacing and processing unit coupled to the plurality of keys and responsive to actuation of a selected combination of at least one key by generating data representing a character and processing said data; and a display for displaying a representation of said character represented by the data generated by the processing circuit, and wherein the processor is arranged to control the display to display an indication of characters that will be input if a combination of one or more input keys is actuated by the user; and an apparatus for generating input data, the apparatus comprising a housing; a display screen mounted to the housing; a plurality of input keys proximate to the display screen and disposed around the housing at positions that facilitate respective actuation by and least some digits on a single hand; a processor, coupled to the input keys and to the display screen, for generating data representing symbols for display on the display screen, which symbols identify combinations of at least one input key corresponding to respective characters from a character set, the processor responding to simultaneous action of an identified combination by generating digital data representing the corresponding character displayed on the display screen, and a data input device comprising a housing; a plurality of user operable input means disposed about the housing; data generating means for generating display data defining graphics identifying combinations of at least one of said user operable input means and a set of characters respectively associated with said combinations; displaying means mounted to said housing and coupled to said processing means for displaying said graphics defined by said display data; and generating means coupled to the plurality of user operable input means and responsive to actuation of a selected combination of at least one user operable input means by generating data representing the character identified by the displayed graphics, wherein the data generating means is responsive to manipulation of said user operable input means to generate data defining graphics for another set of characters respectively associated with said combinations, wherein the data generating means is

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arranged to generate data for characters which are displayed in an alphabetical order, wherein the data generating means is arranged to generate data for characters which are displayed in a most frequently used letter order. Matthews also teaches a method of generating input data using an input device in which a plurality of input keys are disposed around a display screen, the method comprising generating display data defining graphics identifying combinations of at least one of said input keys and a set of characters respectively associated with said combinations; displaying said graphics defined by said display data; and responding to actuation of a selected combination of at least one user operable input means by generating data representing the character identified by the displayed graphics, further comprising responding to manipulation of said input keys by generating data defining graphics for another set of characters respectively associated with said combinations, wherein the display data is generated for characters which are displayed in an alphabetical order, wherein the display data is generated for characters which are displayed in a most frequently used letter order, further comprising generating data representing graphics identifying sub-sets of characters from a character set; and responding to manipulation of said input keys by outputting data so as to change the display screen from displaying graphics corresponding to one sub-set of characters to displaying graphics corresponding to another sub-set of characters as claimed (see for example figures 1-6 and column 6 line 30 through column 17 line 8).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 14-16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews (5432510) as applied to the claims above, and further in view of Pallakoff (2002/0163504). With respect

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to claims 14-16 and 21, Matthews teaches the invention as claimed by claims 13 and 17 (see the above 102 rejection). However, Matthews lacks a teaching of the input keys comprising a jog key as claimed. Pallakoff is relied upon for its teaching of the input keys comprising a jog key as claimed (see for example paragraph 193). It would have been obvious to one of ordinary skill in the art at the time inventions was made to incorporate the teachings of Pallakoff into the apparatus of Matthews to provide the user with multifunction keys, thus minimizing the over-all apparatus.

Allowable Subject Matter

4. Claims 5-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: with respect to claims 5-7, the prior art of record fails to teach or fairly suggest of the plurality of keys comprising a plurality of buttons, rocker switch and/or jog shuttle button which enables more than two different states as claimed.

Response to Arguments

6. Applicant's arguments filed 11/24/03 have been fully considered but they are not persuasive. With respect to applicant's remarks concerning the rejection of claims 1-4, 8-13, 17-20, and 22-26 under 35 U.S.C. §102 (see above rejection), in that Matthews (5432510) does not teach "in complete detail" (emphases added) every element as contained in the claims (see applicant's remarks on pages 2-4). It is axiomatic that anticipation of a claim under §102 can be found only if the prior art reference discloses every element of the claim(s). **See In re King**, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986) and **Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.**, 730 F.3d 1452, 1458, 221 USPQ 481, 485 (Fed. Cir. 1984). "Anticipation is established only when a single prior art reference discloses, expressly or under principles of inherency, each and every element of a claimed

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invention.” **RCA Corp. v. Applied Digital Data Sys, Inc.**, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.), cert. Dismissed 468 U.S. 1228 (1984), citing **Kalman v. Kimberly-Clark Corp.**, 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983). In this instant case, Matthews teaches the claimed invention as set forth above expressly and under principles of inherency. It is inherent for a processor circuit to be responsive to an input key; for a display to display information; for a processor to be coupled to an input key and a display screen; to have data generating means; to generate display data; and to have a “look-up” table (such as a help menu). With respect to applicant’s remarks concerning the rejection of claims 14-16, and 21 under 35 U.S.C. §103 (see above rejection), in that Matthews in view of Pallakoff (2002/0163504) does not yield motivation, suggestion and/or a teachings of the desirability of making the specific combination that was made by the applicant. The examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. In re Nomiya, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one versed in the art, rather than by their specific disclosures. In re Bozek, 163 USPQ 545 (CCPA) 1969. In this case, motivation to combine references is found in one skilled in the art as it is well known to modify an apparatus to minimize the over-all size, shape, or input keys. With respect to claims 5-7, the examiner of record apologizes for omitting claims 5-7 in the previous Office Action. Applicant is thanked for pointing it out.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action

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is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Lea-Edmonds whose telephone number is 571-272-0043. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2800, ext 35. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lisa Lea-Edmonds
Lisa Lea-Edmonds
Primary Examiner
Art Unit 2835